

YAUPON *Ilex vomitoria* Ait. Plant Symbol = ILVO

Contributed By: USDA NRCS National Plant Data Center



William S. Justice @ PLANTS

<u>**Caution**</u>: Poisonous plant-berries can cause nausea, vomiting, and diarrhea.

Alternate names

Yaupon holly, cassena, cassina, cassine, evergreen cassena, evergreen holly, Indian blackdrink, Christmas berry

Uses

Ethnobotanic: Most if not all of the Native American tribes in the Southeastern United States including the Alabama, Cherokee, Creek, Natchez, and Seminole used Yaupon for medicinal as well as other purposes. A decoction was made from the leaves and shoots, called "black drink", which was used medicinally, ceremonially, and was also served as a social drink. The leaves and shoots, which contain caffeine, were roasted in an earthenware container over a fire, much like coffee beans are roasted. The black drink was drunk socially and offered to visitors to indicate friendly intensions. Its primary medicinal use was as an emetic, to induce vomiting and as a purgative or laxative. It was taken to cure "a tremor in the nerves." The drink was used in ceremonial medicine as an emetic to "clear out the system and produce ceremonial purity." In some tribes, women and boys were prohibited from imbibing the drink. The Florida Seminoles still brew a "black drink" for their annual Green Corn Dance, although it is not always made with Yaupon, but from other plants. The plant

Plant Guide

was also used as a hallucinogen to "evoke ecstasies." The bark was used to treat nightmares where the patient sees ghosts and talks during sleep. Sore eyes were treated with eyewash made by scraping off the inner bark and boiling it in water for several hours. The wood was used to make arrows and ramrods that were used in hunting and fishing. In addition to trading Yaupon with nearby neighbors, Native American tribes in the Southeastern United States probably increased the distribution of yaupon. There is evidence that they transplanted and cared for the trees (see Hammett 1992 for references).

Wildlife: The showy red berries of yaupon attract wildlife and are an important food for many songbirds, gamebirds and waterfowl. Bluebirds, catbirds, mockingbirds, robins, yellow-shafted flickers, red-naped sapsuckers, yellow-bellied sapsuckers, white-throated sparrows and cedar waxwings are among the many songbirds that feed on the berries. Florida ducks, black ducks, mourning doves, ruffed grouse, bobwhite quail and wild turkeys also consume the berries. Armadillos, black bears, gray foxes, western foxes, raccoons and skunks eat the fruits. White-tailed deer browse the foliage and twigs. The evergreen nature of the yaupon is important to wildlife as it provides cover during the winter months.

Status

Please consult the PLANTS Web site and your State Department of Natural Resources for this plant's current status (e.g. threatened or endangered species, state noxious status, and wetland indicator values).

Description

General: Holly Family (Aquifoliaceae). Yaupon is a native, perennial, evergreen shrub or a small tree (8 m tall). The leathery leaf blades (1 to 2.5 cm long) are alternate, elliptical or oval with shallow teeth at the margins. The upper surface is a lustrous green with a lighter green lower surface. The leaves contain caffeine. Yaupon is the only native plant in North America that contains caffeine. Flowers (5 to 5.5 mm) with four greenish white petals appear from March through May. Blooms appear on axillary clusters on year-old wood. Male flowers appear in clusters while female flowers grow either solitarily or in pairs. Young stems are covered with a purplish down which changes to whitish gray with age. The bark is light in color, from white to gray. The heartwood is hard and close-grained. Female plants

Plant Materials http://plant-materials.nrcs.usda.gov/ Plant Fact Sheet/Guide Coordination Page http://plant-materials.nrcs.usda.gov/ National Plant Data Center http://plant-materials.nrcs.usda.gov/ have beautiful, round fruits that are a translucent red (5 to 6 mm in diameter) and contain four nutlets. The fruits frequently stay on the bush until the following spring.

Distribution: Yaupon occurs in the Coastal Plain of the Southeastern United States. For current distribution, please consult the Plant Profile page for this species on the PLANTS Web site.

Habitat: Yaupon generally occurs in coastal areas in well-drained sandy soils. It can be found on the upper edges of brackish and salt marshes, sandy hammocks, coastal sand dunes, inner-dune depressions, sandhills, maritime forests, nontidal forested wetlands, well-drained forests and pine flatwoods.

Establishment

Yaupon is a picturesque tree with an upright stature and irregular branches. The plants may be used as screens, hedges and mass plantings. They make good specimen trees and can be espaliered or used as a topiary plant. The trees are one of the toughest of the hollies, easy to transplant, medium to fast growing and grow well on a variety of soils. They can grow in dry to fairly wet soils and are tolerant of salt spray. They make excellent plants for coastal areas but also do well a considerable distance from the coast. Yaupon is better adapted to warmer climates than other evergreen hollies. Be sure to include at least one male plant in order to insure adequate pollination for fruit set.

Management

The tree commonly forms thickets by sending up suckers that sprout from the roots. The tree responds well to pruning and shearing. Limbs may be removed in order to expose the bark, which is a lovely grayish white.

Pests and Potential Problems

Yaupon has no serious pest or disease problems although leafminers have been reported to occasionally be a problem.

Cultivars, Improved and Selected Materials (and area of origin)

These plant materials are readily available from commercial sources. Contact your local Natural Resources Conservation Service (formerly Soil Conservation Service) office for more information. Look in the phone book under "United States Government." The Natural Resources Conservation Service will be listed under the subheading "Department of Agriculture."

References

Bailey, L.H. & E.Z. Bailey 1976. *Hortus Third: A concise dictionary of plants cultivated in the United States and Canada*. Simon and Schuster Macmillan Co., New York, New York. 1290 pp.

Brown, R.C. 1994. *Florida's first people: 12,000 years of human history*. Pineapple Press, Inc., Sarasota, Florida. 262 pp.

Dirr, M.A. 1998. *Manual of woody landscape plants. Fifth Edition*. Stipes Publishing, Champaign, Illinois. 1187 pp.

Godfrey, R.K. & J.W. Wooten 1979. *Aquatic and wetland plants of Southeastern United States*. Vol 2. University of Georgia Press, Athens, Georgia. 933 pp.

Greene, W.F. & H.L. Blomquist 1953. *Flowers of the South: Native and exotic.* University of North Carolina Press. Chapel Hill, North Carolina. 208 pp.

Halfacre, R.G. & A.R. Showcroft 1979. *Landscape plants of the Southeast*. Sparks Press, Raleigh, North Carolina. 325 pp.

Hammett, J.E. 1992. *The shapes of adaptation: Historical ecology of anthropogenic landscapes in the Southeastern United States.* Landscape Ecology 7(2): 123-135.

Martin, A.C., H.S. Zim & A.L. Nelson 1951. *American wildlife and plants: A guide to wildlife food habits.* Dover Publications, New York. 500 pp.

Merrill, W. L. 1979. *The beloved tree:* Ilex vomitoria among the Indians of the Southeast and adjacent region pp 40-82 in Charles M. Hudson, Editor. Black Drink: A Native American Tea. University of Georgia Press, Athens, Georgia. 175 pp.

Moerman, D.E. 1998. *Native American ethnobotany*. Timber Press, Portland, Oregon. 927 pp.

Moerman, D.E. 1999. Native American Ethnobotany Database: Foods, drugs, dyes and fibers of native North American Peoples. The University of Michigan-Dearborn. [Online]. Available: <u>http://www.umd.umich.edu/cgi-bin/herb</u> (19 June 2001).

Neill, W.T. 1956. *Florida's Seminole Indians*. Second Edition. Great Outdoors Publishing Co., St. Petersburg, Florida. 128 pp. Small, J.K. 1933. *Manual of Southeastern flora*. University of North Carolina Press, Chapel Hill, North Carolina. 1554 pp.

Sturtevant, W.C. 1954. *The Mikasuki Seminole: medical beliefs and practices*. Doctoral Dissertation, Yale University. 538 pp.

Swanton, J.R. 2000. *Creek religion and medicine*. University of Nebraska Press, Lincoln, Nebraska. 684 pp.

Taylor, L.A. 1940. *Plants used as curatives by certain Southeastern Tribes*. Botanical Museum of Harvard University, Cambridge, Massachusetts. 88 pp.

Tiner, R.W. 1993. *Field guide to coastal wetland plants of the Southeastern United States*. University of Massachusetts Press, Amherst. 328 pp.

U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory 2001, May. *Fire Effects Information System*, [Online]. Available: <u>http://www.fs.fed.us/database/feis/</u>. [19 June 2001].

Whitcomb, C.E. 1983. *Know it and grow it, II: A guide to the identification and use of landscape plants.* Lacebark Publications, Stillwater, Oklahoma. 740 pp.

Young, J.A. & C.G. Young 1992. *Seeds of woody plants in North America*. Dioscorides Press, Portland, Oregon. 407 pp.

Prepared By

Diana L. Immel USDA, NRCS, National Plant Data Center, c/o Environmental Horticulture Department, University of California, Davis, California

Species Coordinator

M. Kat Anderson USDA, NRCS, National Plant Data Center, c/o Environmental Horticulture Department, University of California, Davis, California

Edited: 27sep01 jsp; 20may03 ahv; 060801 jsp

For more information about this and other plants, please contact your local NRCS field office or Conservation District, and visit the PLANTS Web site<<u>http://plants.usda.gov</u>> or the Plant Materials Program Web site <<u>http://Plant-Materials.nrcs.usda.gov</u>> The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's <u>TARGET Center</u> at 202-720-2600 (voice and TDD).

To file a complaint of discrimination write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice or TDD). USDA is an equal opportunity provider and employer.

Read about <u>Civil Rights at the Natural Resources Convervation</u> <u>Service</u>.